Enclosure D: More Detailed Look At Administrative Concepts

ENCLOSURE D: MORE DETAILED LOOK AT ADMINISTRATIVE CONCEPTS

The following actions will be initiated through an appropriate combination of proposed rulemaking and enforceable orders.

- 1. Disposal into non-hydrocarbon producing zones of aquifers that are clearly not exempt:
 - a. No new disposal wells will be permitted unless and until EPA approves an aquifer exemption.
 - b. Existing disposal wells:
 - i. If potentially impacting water supply wells, ² the Division will issue emergency order to operator to cease injection immediately. Water Board will issue an information order. ³
 - ii. If not potentially impacting water supply wells, and the aquifer is 3,000 mg/L total dissolved solids (TDS) or less, injection must cease no later than October 15, 2015 unless EPA approves an aquifer exemption. Water Board will issue an information order.
 - iii. If not potentially impacting water supply wells, and the aquifer is more than 3,000 mg/L TDS and less than 10,000 mg/L TDS, injection must cease no later than February 15, 2017 unless EPA approves an aquifer exemption. Water Board will issue an information order. If there are supply wells in any portion of the aquifer, or if any portion of the aquifer is at a depth that may be reasonably expected to supply a public water system, the Division and the Water Board may issue orders on a higher priority basis.
- 2. Injection into hydrocarbon producing zones of aquifers that are clearly not exempt:
 - a. If groundwater in the vicinity of the hydrocarbon producing zone does not currently have any beneficial use⁴

¹ Hydrocarbon producing zone is the portion of an aquifer that "cannot now and will not serve as a source of drinking water" because: "It is mineral, hydrocarbon or geothermal energy producing, or can be demonstrated by a permit applicant as part of a permit application for a Class II or III operation to contain minerals or hydrocarbons that considering their quantity and location are expected to be commercially producible." (40 CFR § 146.4 (b)(1).)

² Injection wells potentially impacting water supply wells include injection wells into aquifers with 3,000 mg/L total dissolved solids (TDS) or less that meet either of the following criteria: (1) the uppermost depth of the injection zone is less than 1500 feet below ground surface (regardless of whether any existing supply wells are in the vicinity of the injection well), or (2) the injection depth is within 500 feet vertically and 1 mile horizontally of the screened portion of any existing water supply well.

³ Water Board information order will require that the operator submit information related to the injection and the quality of groundwater.

⁴ Note that this does not include any use of produced water.

- New wells that are part of an approved project may be permitted with the express condition that permit expires on February 15, 2017, unless EPA approves an aquifer exemption.
- ii. For existing wells, injection must cease by February 15, 2017, unless EPA approves an aquifer exemption.
- b. If groundwater in the vicinity of the hydrocarbon producing zone has any current beneficial use
 - i. No new permits will be issued.
 - ii. For existing wells, injection must cease by February 15, 2017 (or sooner, depending on the use of the groundwater), unless EPA approves an aquifer exemption.

3. <u>Injection into eleven aquifers with disputed exemption status:</u>

- a. No new disposal wells will be permitted unless and until EPA approves an aquifer exemption evaluation. An exception may be made in the unusual case where the proposed injection well is part of an approved project, and an initial screening of the target zone shows that the zone contains hydrocarbons, has very high levels of naturally-occurring constituents (e.g., arsenic or boron), or there are other factors that make it unsuitable for beneficial use.
- b. Existing disposal wells:
 - i. If potentially impacting water supply wells, the Division will issue emergency order to operator to cease injection immediately. Water Board will issue an information order.
 - ii. If not potentially impacting water supply wells, injection must cease no later than February 15, 2017, unless EPA approves an aquifer evaluation. Water Board will issue an information order. If there are supply wells in any portion of the aquifer, or if any portion of the aquifer is at a depth that may be reasonably expected to supply a public water system, the Division and the Water Boards may issue orders on a higher priority basis.
- 4. The Division will submit any exemption requests or evaluations for the above three categories of aquifers over time, and with sufficient opportunity for EPA to review the requests and approve or disapprove all of them by February 15, 2017.